

Williams, Laura

From: Bahrman, Sarah
Sent: Friday, July 11, 2014 3:22 PM
To: Mylott, Richard; Mohr, Mindy; McClain-Vanderpool, Lisa; McGrath, Shaun; Cantor, Howard; Card, Joan; Ostrander, David; Williams, Laura; Romero, David; Mitre, Alfreda; Phillips, Gregory; Hestmark, Martin; Thomas, Deb; Videtich, Callie; Hoskie, Sadie; Palomares, Art; Pardue-Welch, Kimberly; Merida, Mario
Subject: UPDATE: Mandaree, ND Drinking Water

I just spoke with Charles Cech at the ND DOH Lab, who provided some preliminary results from the raw water and treated drinking water samples. Total Dissolved Solids (calculated from conductivity), sodium, and total alkalinity were all within normal ranges, indicating no impact from the brine water to the drinking water supply. Diesel range organics tests were non-detect for petroleum products, again indicating no impact to the drinking water supply. The plant will continue operating normally. The operator and I discussed that there is no need to collect additional samples at this time.

Please let me know if you have any questions.

Sarah E. Bahrman | Unit Chief, Drinking Water | U.S. Environmental Protection Agency - Region 8
(p) 303.312.6243 | (c) 303.903.8515 | (f) 877.876.9101

From: Bahrman, Sarah
Sent: Thursday, July 10, 2014 3:43 PM
To: Mylott, Richard; Mohr, Mindy; McClain-Vanderpool, Lisa; McGrath, Shaun; Cantor, Howard; Card, Joan; Ostrander, David; Williams, Laura; Romero, David; Mitre, Alfreda; Phillips, Gregory; Hestmark, Martin; Thomas, Deb; Videtich, Callie; Hoskie, Sadie; Palomares, Art; Pardue-Welch, Kimberly; Merida, Mario
Subject: UPDATE: Mandaree, ND Drinking Water

I just spoke with Jack Sorum of IHS and Bruce Fox, the head operator of the Mandaree Water Plant. Unfortunately they don't yet have any results from samples collected this morning, but hope to have that information first thing tomorrow. Bruce will call me as soon as he has any data and I will send that information out to you all. Jack and Bruce did verify that the intake pumps are on and the plant is back to normal operations. They shut the intake down for some time yesterday and were able to treat water from a 1M gallon raw water tank temporarily to continue to provide water to the town of Mandaree.

Please let me know if you have any questions.

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(p) 303.312.6243 | (c) 303.903.8515 | (f) 877.876.9101

From: Bahrman, Sarah
Sent: Thursday, July 10, 2014 12:23 PM
To: Mylott, Richard; Mohr, Mindy; McClain-Vanderpool, Lisa; McGrath, Shaun; Cantor, Howard; Card, Joan; Ostrander, David; Williams, Laura; Romero, David; Morales, Monica; Mitre, Alfreda; Phillips, Gregory; Hestmark, Martin; Thomas, Deb; Videtich, Callie; Hoskie, Sadie
Subject: UPDATE: Mandaree, ND Drinking Water

Quick Update:

According to Pete Stevenson, the Army Corps of Engineers was out on the lake in the area of the intake to the Mandaree water plant and did not notice any visible sheen or other indicators that contamination had reached the water plant. As a precautionary measure, the water operators have collected samples from the area around the intake and from the

treated water and will test for diesel range organics, sodium (as an indicator of total dissolved solids or brine), metals, and radiologicals. Samples are at the state lab in Bismarck and we should get some preliminary results later today.

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(p) 303.312.6243 | (c) 303.903.8515 | (f) 877.876.9101

From: Mylott, Richard

Sent: Thursday, July 10, 2014 9:38 AM

To: Bahrman, Sarah; Mohr, Mindy; McClain-Vanderpool, Lisa; McGrath, Shaun; Cantor, Howard; Card, Joan; Ostrander, David; Williams, Laura; Romero, David; Morales, Monica; Mitre, Alfreda; Phillips, Gregory; Hestmark, Martin

Subject: UPDATED AP: Saltwater leak alters water supply for 1 ND town

Fyi. Pete Stevenson is on-scene.

Estimated 1M gallons of saltwater leaks in ND bay

By Associated Press July 9 at 7:54 PM

MANDAREE, N.D. — Around 1 million gallons of saltwater spilled into a North Dakota bay, causing some environmental damage but sparing a nearby lake that provides drinking water for an American Indian reservation, company and tribe officials said Wednesday.

Three Affiliated Tribes Chairman Tex Hall told The Associated Press that an underground pipeline near Mandaree leaked about 24,000 barrels of brine into Bear Den Bay, a tributary to Lake Sakakawea. That Missouri River reservoir provides water to communities on the Fort Berthold Indian Reservation, occupied by the Mandan, Hidatsa and Arikara tribes in the heart of North Dakota's booming oil patch.

Saltwater is an unwanted byproduct of oil and natural gas drilling that can be 20 times saltier than ocean water. At least some damage to trees, bushes and grass was reported, but the extent wasn't immediately clear.

Miranda Jones, vice president of environmental safety and regulatory at Houston-based Crestwood Midstream Services Inc., whose subsidiary Aero Pipeline LLC owns the pipeline, said the leak likely started over the weekend but wasn't discovered until Tuesday. The pipeline is not equipped with a system that sends an alert when there's a leak, she said.

"This is something that no company wants on their record, and we are working diligently to clean it up," Jones said.

Tribal leaders switched to an alternative source of water Wednesday but were again tapping Lake Sakakawea after concluding the contamination was limited to the bay, Hall said.

An investigator with the federal Environmental Protection Agency arrived Wednesday at the site.

Kris Roberts, an environmental geologist with the North Dakota Health Department, said damage from the toxic spill could be seen Wednesday.

“We’ve got dead trees, dead grasses, dead bushes, dying bushes,” Roberts said.

Karolin Rockvoy, a McKenzine County Emergency manager, said the spill appeared to have gone undetected for some time.

“Looking at vegetation, it didn’t happen yesterday,” she said. “I can guarantee you that.”

The number of saltwater spills in North Dakota has grown with the state’s soaring oil production.

North Dakota produced 25.5 million barrels of brine in 2012, the latest figures available. A barrel is 42 gallons. There were 141 pipeline leaks reported in North Dakota in 2012, 99 of which spilled about 8,000 barrels of the saltwater. About 6,150 barrels of the spilled saltwater was recovered, state regulators said.

In 2006, a broken oil pipeline belched more than a million gallons of saltwater into a northwestern North Dakota creek, aquifer and pond. The cleanup efforts are ongoing at that site, which has been called the worst environmental disaster in state history.

The ruptured pipeline allowed saltwater to spew unnoticed for weeks into a tributary of the Yellowstone River near Alexander and caused a massive die-off of fish, turtles and plants.

That spill came during the infancy of North Dakota’s oil boom. Now, a network of saltwater pipelines extends to hundreds of disposal wells in western North Dakota, where the brine is pumped underground for permanent storage.

Proposed legislation to mandate flow meters and cutoff switches on such lines was overwhelmingly rejected last year in the Legislature.

MacPherson reported from Bismarck, N.D.

From: Mylott, Richard

Sent: Wednesday, July 09, 2014 4:27 PM

To: Bahrman, Sarah; Mohr, Mindy; McClain-Vanderpool, Lisa; McGrath, Shaun; Cantor, Howard; Card, Joan; Ostrander, David; Williams, Laura; Stevenson, Peter; Romero, David; Morales, Monica; Mitre, Alfreda; Phillips, Gregory; Hestmark, Martin

Subject: AP: Saltwater leak alters water supply for 1 ND town

Fyi.

Saltwater leak alters water supply for 1 ND town

By Associated Press July 9 at 5:31 PM

MANDAREE, N.D. — Tribal leaders switched to an alternative source of water Wednesday for one town on an American Indian reservation in North Dakota following a substantial leak from a saltwater pipeline.

Kris Roberts, an environmental geologist with the North Dakota Health Department, said the spill was reported Tuesday but officials did not have any information on volumes or if the brine had reached Bear Den Bay, a tributary to Lake Sakakawea. The lake, a reservoir of the Missouri River, provides drinking water to several communities on the Fort Berthold Indian Reservation, occupied by the Mandan, Hidatsa and Arikara tribes in the heart of North Dakota's booming oil patch.

Saltwater is an unwanted byproduct of oil and natural gas drilling that can be 20 times saltier than ocean water.

Three Affiliated Tribes Chairman Tex Hall said in a statement that "there are no specific concerns over the water safety" but that tribal officials closed the water intake to Mandaree as a precaution without elaborating on what steps were taken. Hall said the briny water did not appear to have reached Lake Sakakawea.

Houston-based Crestwood Midstream Services Inc., owner of the pipeline, said in a statement Wednesday that the spill was contained and cleanup was underway. The company said it was investigating the cause of the leak but would not comment beyond its statement.

The federal Environmental Protection Agency said an investigator was heading to the site Wednesday afternoon.

Roberts said damage from the toxic spill could be seen Wednesday.

"We've got dead trees, dead grasses, dead bushes, dying bushes," Roberts said.

Karolin Rockvov, a McKenzine County Emergency manager, said the spill appeared to have gone undetected for some time.

"Looking at vegetation, it didn't happen yesterday," she said. "I can guarantee you that."

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